AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/694,175

Attorney Docket No.: Q78159

REMARKS

This Amendment, filed in reply to the Office Action dated September 27, 2007, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-10 are all the claims pending in the application and claims 11-15 are hereby added.

Claim Rejections - 35 U.S.C. § 112, Second Paragraph

Claims 1-10 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

The Examiner alleges that it is unclear whether the computation recited in claim 1 is based on either one of three, any combination or three, or all, among the three parameters recited in claim 1. Applicant submits that claim 1 clearly recites computing a requisite printing time based on at least the three parameters (a type of image format of image data stored in the recording medium, a print size, and the number of printers), i.e. the computation requires at least the three parameters. Claim 6 also recites this limitation clearly. Therefore, Applicant respectfully requests the Examiner to withdraw the 112 second paragraph rejection based on this limitation. The Examiner's rejection is based on words that do not appear in the claims, as indicated by the rejection under § 103. However, Applicant's actual recitation and not that set forth by the Examiner's redrafting, is sufficiently clear.

The Examiner alleges that the limitation "content of a print set" is unclear. Applicant hereinabove amends the claims merely to clarify that the "content of a print set" refers to "the

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contents set by the setting device." Applicant would request the Examiner to withdraw the 112, second paragraph rejection based on this limitation.

The Examiner alleges that the limitation "a print size" has not been sufficiently described in the claims. Applicant submits that the print size refers to a card size, an L size, etc and that the definition of a print size can be found at line 4, page 7 of the specification. Because the specification explains the meaning of the term "print size", the claim does not have to explicitly recite the meaning of the term "print size".

The Examiner alleges that the term "the number of printers" has insufficient antecedent basis. Applicant amends claims 1 and 6 to obviate this rejection.

The Examiner alleges that the limitation "types of print services" recited in claims 3 and 8 is unclear. As to the term of "type of print services", Applicant refers to the Examiner to the 16th paragraph in the specification, at page 3, line 21. That is, the term of "the type of print services" refers to multiple printing, index printing, normal printing, etc. The explanation about the term is also seen in the 43rd paragraph, page 7, line 3. The specification at page 7, line 3 is hereby amended to maintain consistency in the terminology and description.

Claim Rejections - 35 U.S.C. § 103(a)

Claims 1, 4-6 and 9-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over JP 2001-042451 (published on Feb. 16, 2007, hereinafter "Fukushima"), and further in view of JP 2001-018497 (published on Jan. 23, 2001, hereinafter "Tanaka") (and alternatively over Letellier (U.S. Pub. No. 2004/0012797), hereinafter "Letellier" and Ueda et al. (U.S. Patent No. 7,046,383), hereinafter "Ueda").

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Applicant respectfully submits the following arguments in traversal of the prior art rejections.

Fukushima is generally directed towards a digital printer that reads and processed the read image data. Fukushima discloses means for setting the number of copies of sheets to be printed and means for determining a printer to be used.

Tanaka discloses determining a time required for printing a selected image. The required time is calculated based on the set print specification. See Abstract. The printing specification is defined as the number of sheets to be printed, a paper size and the image size. See [0028].

The Examiner states that the limitation "at least a type of image format of image data stored in the recording medium, a print size, and the number of printers" will be interpreted as either one of the three parameters, i.e., the above limitation would be interpreted as "at least one of a type of image format of image data stored in the recording medium, a print size, and the number of printers". However, such an interpretation is incorrect as the claim language is quite clear and requires the computation to consider the three parameters.

Applicant submits that to the extent Tanaka suggests calculating a printing time based on the size of the paper and the image size, <u>Tanaka fails to consider a type of image format of image</u> data stored in the recording medium and a number of printers in its calculation.

The Examiner admits that the combination of Fukushima and Tanaka does not teach or suggest a printing time calculation based on a type of image format of image data stored in the recording medium and a number of printers in its calculation. See Office Action page 7.

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The Examiner cites to Letellier and Ueda to cure the deficiencies of the primary combination of Fukushima and Tanaka.

The Examiner states that Letellier discloses determining the processing time of a preprocessed image page description based on the knowledge of the actual or expected number and type of image primitives contained in the image page description. The Examiner contends that determining the actual or expected number and type of image primitives corresponds to determining the image format of an image stored in the recording medium.

Letellier is directed towards decreasing the time required to generate a tangible output image. Letellier recognizes that rasterization of the page description can often become a bottleneck in image generation. See Background. Letellier discloses a method of selectively preprocessing an image page description. Letellier weighs the benefit of preprocessing and transmitting a page description versus sending an unaltered page description that would be smaller in size. Letellier estimates the time it would take to transmit an unaltered page description and the processing time of the unaltered page description by an image generating device. Letellier also estimates the time it would take to preprocess a page description, transmit the preprocessed page description, and process the preprocessed page description (processing by the image generating device). Based on the above two calculations, Letellier would determine whether to preprocess a page description or transmit an unaltered page description. See [0025]-[0033].

To the extent that Letellier suggests determining processing time of a page description (processed or unprocessed), Letellier does not suggest to one skilled in the art, that it would be advantageous to consider the processing time while calculating the time required to finish a

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<u>printing job.</u> There is no rationale for modifying the calculation of Tanaka to include the determination of the processing time disclosed by Letellier. Applicant submits that the Examiner has relied on *impermissible hindsight* in formulating this rejection based on Letellier.

To the extent Letelier discloses that using JPEG image compression to decrease transmission time, Lettellier does not disclose using the format of the image data as a parameter to compute image generating time. According to the present invention, the total printing time computed based on "image generating time", "total number of prints", "printing time per print" and "number of printers" (the 56th paragraph and the 57th paragraph), and the image generating time is computed using the format of the image data. That is, the printer has data which prescribes image processing time per unit of data size according to types of image format (for example, in Fig. 6, a unit is byte, and types of image format are JPEG, TIFF, BMP.) (the 59th paragraph of the present invention), and calculates image generating time using the processing time per unit of data size and the data size of the image data.

The Examiner admits that even Letellier does not suggest considering the number of printers in the computation of the printing time. The Examiner states that Ueda discloses such a feature.

Ueda discloses a printing system with a plurality of printers. An operator is given the option of selecting a printer from the plurality of printers. A calculation means calculates a printing cost for a single printing and a printing time necessary for <u>each individual printer</u> to print a job. Ueda further provides for displaying the calculated time and quality of the print for <u>each individual printer</u>. See col. 7-8. However, Ueda does not teach or even suggest calculating the number of printers. To the extent that Ueda discloses displaying the time it would take for

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each printer to do the same job, Ueda does not suggest calculating the number of printers while calculating the time required to accomplish a printing job.

For at least the above exemplary reasons, Applicant respectfully submits that the Examiner has not presented a *prima facie* case of obviousness. Therefore, claim 1 is patentable over the combination of Fukushima, Tanaka, Letellier, and Ueda because even assuming *arguendo* that these references may be combined, their combination does not teach or even suggest every feature recited in claim 1.

Claims 2 and 7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fukushima, and Tanaka (and alternatively Letellier and Ueda et al.), and further in view of JP 2000-153659 (published on June 6, 2000, hereinafter "Hara").

Hara does not cure the deficiencies of the combination of Fukushima, Tanaka, Letellier, and Ueda. Therefore, claims 2 and 7 are patentable.

Claims 3 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable ver Fukushima et al., and Tanaka (and alternatively Letellier and Ueda et al.), and further in view of Simpson et al. (U.S. Pub. No. 2002/0135799).

Simpson does not cure the deficiencies of the combination of Fukushima, Tanaka, Letellier, and Ueda. Therefore, claims 3 and 8 are patentable.

The remaining dependent claims are patentable at least by virtue of their dependency.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Respectfully submitted,

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